We Claim:

1. A multibeam scanning device for scanning a photosensitive material with a multi-spot array, comprising:

a plurality of fiber exits for providing laser beams, said fiber exits having first alignment devices;

a mount having a plurality of holders for in each case a respective one of said fiber exits, said fiber exits being placed detachably into said holders, said mount having second alignment devices complementary to said first alignment devices;

a beam control device configured to perform at least one operation selected from the group consisting of interrupting the laser beams emerging from said fiber exits, deflecting the laser beams emerging from said fiber exits and modulating an intensity of the laser beams emerging from said fiber exits in order to provide a multi-spot array with image points on the photosensitive material; and

a respective one of said first alignment devices and a respective one of said second alignment devices being one of aligned and mutually engaged when a respective one of said fiber exits, which is disposed in a respective one of said holders and defines a fiber exit axis, has a previously

defined rotational angle in relation to the fiber exit axis, and wherein all the image points of the multi-spot array produced on the photosensitive material by imaging the fiber exits have a respective desired position and have a substantially identical angular alignment in relation to the respective desired position when said first alignment devices of all of said fiber exits and said second alignment devices of said mount are one of aligned and mutually engaged.

2. The multibeam scanning device according to claim 1, wherein said fiber exits and said beam control device are configured to expose a film as the photosensitive material.

3. The multibeam scanning device according to claim 1, wherein said fiber exits and said beam control device are configured to engrave a printing plate as the photosensitive material.

4. The multibeam scanning device according to claim 1, wherein said beam control device includes correction devices for displacing individual ones of the image points of the multi-spot array, said correction devices deflect the laser beams electronically in a direction perpendicular to an axis extending through the desired position of given ones of the image points.

5. The multibeam scanning device according to claim 1, wherein said beam control device includes correction devices, said correction devices electronically delay a respective time of incidence of the laser beams on the photosensitive material for displacing individual ones of the image points of the multi-spot array on the photosensitive material in a given direction parallel to a direction of a relative movement between said fiber exits and the photosensitive material.

6. The multibeam scanning device according to claim 1, wherein said beam control device includes a plurality of acousto-optical modulators disposed between said fiber exits and the photosensitive material.

7. The multibeam scanning device according to claim 6, wherein said acousto-optical modulators are used as correction devices, said correction devices are configured to perform at least one operation selected from the group consisting of deflecting the laser beams and delaying a time of incidence of the laser beams for displacing individual ones of the image points.

8. The multibeam scanning device according to claim 1, wherein said beam control device controls the laser beams such that a converging fan of beams is formed.

9. The multibeam scanning device according to claim 1, wherein said beam control device includes an f-θ optical system for imaging said fiber exits telecentrically onto the photosensitive material.

10. The multibeam scanning device according to claim 1, wherein said first alignment devices of said fiber exits each includes a radially projecting element.

11. The multibeam scanning device according to claim 10, wherein:

each of said fiber exits includes a collimator lens, a fiber optic conductor, a capillary tube provided between said fiber optic conductor and said collimator lens, and a bush surrounding said capillary tube; and

said radially projecting element is fixed on said bush and projects beyond said bush.

12. The multibeam scanning device according to claim 1, wherein said first and second alignment devices include respective markings on said fiber exits and on said mount such that said markings can be aligned in relation to one another by rotating said fiber exits in said holders.

13. A device for one of exposing and processing a photosensitive material with laser beams including the multibeam scanning device according to claim 1.

14. A method for correcting a position of image points of a multi-spot array, the method which comprises:

providing a multibeam scanning device configured to produce a multi-spot array by imaging a plurality of fiber exits of the multibeam scanning device on a photosensitive material that is moved in relation to the multibeam scanning device and by performing at least one operation selected from the group consisting of interrupting laser beams emerging from the fiber exits, deflecting laser beams emerging from the fiber exits and modulating an intensity of laser beams emerging from the fiber exits;

inserting the fiber exits in each case into a holder of a mount of the multibeam scanning device at a previously defined rotational angle in relation to a respective longitudinal axis of the fiber exits, such that all of the image points have substantially the same angular alignment in relation to respective desired positions of the image points; and

subsequently reducing, if necessary, respective distances of the image points from the respective desired positions of the

image points by performing at least one operation selected from the group consisting of deflecting the laser beams and delaying a time of incidence of the laser beams on the photosensitive material.

15. The method according to claim 14, which comprises reducing the respective distances of the image points from the respective desired positions of the image points until all of the image points are at the respective desired positions of the image points.

16. The method according to claim 14, which comprises alternately performing the steps of deflecting the laser beams and delaying a time of incidence of the laser beams on the photosensitive material in order to bring the image points step-by-step to the respective desired positions.

17. The method according to claim 14, which comprises deflecting the laser beams in such a way that individual image points of the multi-spot array are shifted in a direction perpendicular to an axis extending through the desired positions of the image points in order to reduce respective distances of the image points from the desired positions of the image points.

18. The method according to claim 14, which comprises delaying the time of incidence of the laser beams on the photosensitive material in a direction parallel to a direction of a relative movement between the multibeam scanning device and the photosensitive material.

19. The method according to claim 14, which comprises performing the at least one operation selected from the group consisting of interrupting laser beams emerging from the fiber exits, deflecting laser beams emerging from the fiber exits and modulating an intensity of laser beams emerging from the fiber exits in an acousto-optical modulator.

20. The method according to claim 19, which comprises delaying the time of incidence of the laser beams on the photosensitive material by using a time control for a supply of voltage signals to the acousto-optical modulator wherein the time control takes account of the respective distances of the image points from the desired positions of the image points.

21. The method according to claim 19, which comprises deflecting the laser beams by changing a frequency of a voltage signal applied to the acousto-optical modulator for performing the at least one operation selected from the group consisting of interrupting laser beams emerging from the fiber exits, deflecting laser beams emerging from the fiber exits

and modulating an intensity of laser beams emerging from the fiber exits.

22. The method according to claim 14, which comprises:

prior to inserting the fiber exits into the holder of the mount, rotating each of the fiber exits about the respective longitudinal axis of the fiber exits in an adjustment device until a respective image point produced by a respective one of the fiber exits has a predefined angular alignment in relation to an axis of rotation; and

providing each of the fiber exits at a respective rotational position according to the predefined angular alignment with an alignment device which, when inserted into the holder of the mount, is one of aligned with and brought into engagement with a complementary alignment device of the mount.